

### Abstract

The invention relates to a method for expanding a first, N-digit data word in two's complement representation to produce a second, (N+M)-digit data word for data transmission and data processing, and to an apparatus for carrying out the method.

5 To provide a method which imposes no increased hardware requirements on an apparatus for carrying out the method and which prevents numerical-range overflows when the converted number is negated, the invention proposes putting the digits of the original number into the more significant places of the target binary number, retaining the order of digits, and entering the digit "1" at least once into the first M-places of the  
10 second binary number.